Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

a handful I was surprised to see a number of whitish threads hanging from the axils of the lower leaves. On examination of these threads, which were from three to six inches long, I found that near the extremity of each of these was a short oblong or cylindrical tuber, from a quarter to half an inch long, and these tubers were undoubtedly for the propagation of the plants. Most of the specimens had evidently borne flowers and fruit at the upper axils, but three or four of the lower joints had developed these tuberiferous threads. I sent some specimens to Dr. Gray, who was interested in them, and wrote that he had often observed the threads, but never the tubers.

GEO. VASEY.

Index to Recent American Botanical Literature.

Anemone nudicaulis, n. sp. Asa Gray. (Botanical Gazette, xi., (1886) p. 17.

Dr. Gray calls attention to an undescribed species of *Anemone*, to which he gives the above name, from wet places near Sand Bay, Minnesota, in or near Canadian territory. The radical leaves resemble those of *A. Richardsoni*, but the involucre consists of a single petiolate leaf, or is wholly wanting; the akenes are tipped with rather short and hooked styles very unlike the long ones of the Arctic plant above mentioned. Flowering specimens are needed to complete the description of the species.

Apples distinguished by their Flowers. W. J. Beal. (Amer. Nat., xx., (1886) pp. 162-165.

Professor Beal suggests that instead of describing apples by their fruit alone, pomologists would do well to pay more attention to the floral characters, and extends the same suggestion to the varieties of other cultivated plants. He gives five figures illustrating the differences in floral structure in as many kinds of apples, which show marked differences in the relative lengths, breadths and hairiness of the styles and their stipes.

Asa Gray. By Charles R. Barnes. (Bot. Gazette, xi., (1886), pp. 1-10.)

An interesting account of Dr. Gray's life and an enumeration of his most important botanical works. A good photoheliotype portrait accompanies the article, and some of the letters and congratulations received by the Doctor on his seventy-fifth birthday are appended.

Bidens.—Barbed Awns of Achenia of. J. L. Zabriskie. (Jour. N. Y. Mic. Soc., i., pp. 198, 199.)

Entomophthora.—A new larval. J. C. Arthur. (Bot. Gazette, xi., pp. 14-17.)

This hitherto undescribed fungus is parasitic in the larvæ of the clover-leaf weevil (*Phytonomus punctatus*, Fabr.) and has been noticed in Western New York and the adjacent portions of Canada. Prof. Arthur gives it the name *E. Phytonomi*, and describes and figures the spores, hyphæ, mycelium, etc.

Erigeron Muirii, Gray, n. sp.

A woodcut figure may be found in the Report of the Cruise of the U. S. Revenue Steamer "Thomas Corwin," in the Arctic Ocean, 1881, Washington, 1885, p. 146. There is also a heliotype plate of the lichens *Cladonia uncialis*, *C. gracilis*, *C. rangiferina*, and *C. cornucopoides*.

Dispersion of some Tree Seeds. W. J. Beal. (Bot. Gazette, xi., pp. 17, 18.)

Mildews of the Grapevine. C. V. Riley. (Rural New Yorker, xlv., pp. 72, 73, 2 figs.)

Lobelia syphilitica.—Cross-fertilizing apparatus of. J. L. Zabriskie. (Jour. N. Y. Mic. Soc., i., pp. 201, 202.)

Pollen Spores of Tradescantia Virginica, L. John M. Coulter and J. N. Rose. (Bot. Gazette, xi., pp. 10-14, one plate.)

These pollen grains were found exceptionally favorable for study; the presence of two nuclei was readily demonstrated, the growth of the pollen-tube watched, and the descent of the nuclei therein observed. The grains were cultivated in a moist chamber, in a hanging drop of a solution of cane sugar. In less than half an hour the pollen-tube begins its development, and may be seen forcing its way through the extine of the grain. The generative nucleus is a large worm-like spindle, and enters the tube some time in advance of the vegetative nucleus.

Superposed Buds. A. F. Foerste. (Bull. Scientif. Lab. Denison University, i., pp. 25-36, one plate.)

An interesting and well-illustrated paper on the morphology of accessory buds, with special reference to those developed vertically above or below the main axillary bud. The first method of arrangement, where the secondary buds appear above the first one developed, is termed *direct* superposition; the second, where they are found below the first bud, *inverted* superposition. Direct superposition is of rare occurrence both in herbaceous and woody plants, but is beautifully shown in the Tartarean Honeysuckle, where the larger principal bud is surmounted by three or four successively smaller ones; also in *Passiflora lutea*, *Coreopsis tinctoria* and *C. tripteris*. Inverted superposition is common in many ligneous and herbaceous plants. Usually the axillary bud first produced reaches a considerable size before a second one appears, and this may be ultimately separated from it for a considerable space by the elongation of the node. Mr. Foerste finds in *Fraxinus viridis*, *F. sambucifolia* and vigorous shoots of *F. Americana*, two buds in the same axil, the lower about one-half the size of the upper. *Cercis Canadensis* has two or three, the lowest often minute and covered by the petiole scar. The hickories have the upper of the two buds excessively developed, the lower remaining insignificant, except in *Carya microcarpa*, where the lower is of larger size. Many other plants are cited. Species in which the upper bud immediately develops into a branch while the lower remains in the bud state are rare in ligneous plants but abundant among herbs. Among those mentioned by Mr. Foerste are *Scrophularia nodosa*, *Gerardia purpurea*, and *Teucrium Canadense*. Later in the season some of these smaller buds may produce branches, as in *Ambrosia trifida*. The flowers and inflorescences of certain species, being homologous with branches, are sometimes superimposed to buds, as in *Delphinium Consolida*. In *Gleditschia triacanthos* the thorn is a specially developed superposed bud. In *Lilium bulbiferum* the bulblets are in inverted superposition to the peduncles.

Botanical Notes.

The Nival Flora of Switzerland: Oswald Heer. (Nouveaux Mem. Soc. Helvét. des Scie. Nat., xxix, part 1.) An interesting summary of the results reached by Prof. Heer in this work, may be found in *Nature*, Vol. xxxiii., pp. 206, 207. From this we